

## **Record of Decision**

### **Final Supplement to the Environmental Impact Statement Pascagoula Harbor Navigation Channel, Jackson County, Mississippi**

#### **U.S. Army Corps of Engineers Mobile District**

This Record of Decision (ROD) documents my decision and rationale for approving the Final Supplement to the Environmental Impact Statement (SEIS) on the Pascagoula Harbor Navigation Channel, Jackson County, Mississippi, August 2010, for continued construction to the federally authorized project dimensions and future operations and maintenance, as described. The U.S. Army Corps of Engineers, Mobile District (USACE) has completed the Final SEIS, associated appendices, and supporting documentation. I have taken into account the comments and correspondence received in response to the public coordination of the document. I find that the preferred alternative - channel widening and deepening, maintenance dredging and dredged material placement in approved disposal sites - is consistent with all applicable statutory and regulatory requirements. The preferred alternative is technically feasible and would be of economic benefit to the Port of Pascagoula and vicinity, includes all practicable means to avoid and/or minimize environmental harm, and is in the public interest.

### **Background**

The USACE is responsible for conducting Federal dredging and dredged material discharge activities associated with the Pascagoula Harbor Federal Navigation Channel.

Improvements to the Pascagoula Harbor Navigation Channel were evaluated in the *Pascagoula Harbor, Mississippi, Feasibility Report* (USACE, 1985). The USACE completed a Final EIS in 1985, and improvements to the Pascagoula Harbor Navigation Channel were authorized by the Water Resources Development Act (WRDA) of 1986 (Public Law [P.L.] 99-662).

Subsequent to this authorization, an Environmental Impact Statement (EIS) for the designation of an Ocean Dredged Material Disposal Site (ODMDS) located offshore of Pascagoula was completed in 1991. The ROD for the improvements to the Pascagoula Harbor Navigation Channel was signed in 1992. Construction of the recommended improvements was completed by 1999, except for widening the Bar Channel from 450 feet to 550 feet, deepening the upper Pascagoula Channel from 38 feet to 42 feet, and deepening the impoundment basin to 56 feet.

The 2010 SEIS addresses completion of the unconstructed portions of the congressionally-authorized improvements to widen and deepen the channel and the continued maintenance dredging operations. The project is conducted under the authority of Section 202(a) of the Water Resources Development Act of 1986 (P.L. 99-662), the Flood Control and Coastal Emergency Act (P.L. 84-99), and the Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico and Pandemic Influenza Act, 2006 (P.L. 109-148). The original 1985 Final EIS was reviewed, and any new conditions that were not addressed in the 1985 Final EIS were evaluated as part of the 2010 SEIS to ensure current compliance with all environmental laws and regulations.

Two Project Information Reports (PIRs) were prepared pursuant to the Emergency Supplemental authority for Pascagoula Harbor to address the remaining unconstructed improvements and future maintenance of the entire Federal project. The Pascagoula Harbor Navigation Project PIR (Channel Widening PIR), dated May 2011, recommends widening the Bar channel by 100 feet to its authorized width of 550 feet. While the SEIS also covers the deepening of the Pascagoula leg of the Mississippi Sound Channel, at the request of the non-Federal Sponsor, the Jackson County Port Authority, the deepening of the channel from 38 feet to 42 feet will not be constructed at this time (as noted in the Channel Widening PIR). Similarly, the Horn Island Pass impoundment area is not part of the Channel Widening PIR and will not be constructed at this time. The Pascagoula River Harbor Dredged Material Management Plan (DMMP) PIR, dated May 2011, recommends raising existing dikes at the Triple Barrel upland site to 35 feet, a non-phased construction of a 425 acre confined open water site to the east and south of Singing River Island, including the creation of 150 acres of wetlands, utilizing existing open water sites, and utilizing maintenance dredged material for beneficial uses. Portions of the DMMP PIR are also addressed in the 2009 Environmental Assessment (EA) (Finding of No Significant Impact (FONSI), dated 3 June 2011).

### **Description of Project Alternatives**

The actions considered in the SEIS include the Proposed Action (Preferred Alternative) and the No-Action Alternative.

#### **Proposed Action**

The proposed action consists of the following elements:

#### **New Dredging Work**

- Remove sediment using several dredging methods:
  - Hopper dredge--a propelled floating plant, which can dredge, store, transport, and dump material.
  - Mechanical dredge--utilizes a bucket to excavate and elevate the dredged material to the surface.
  - Hydraulic cutter head dredge--suctions material from the bottom with a dredge pump, supplemented by mechanical excavators when needed, and discharges the material through a pipeline.
- Dredge channel to authorized dimensions:
  - Increase the Bar Channel width to 550 feet from 450 feet from the 44-foot contour in the Gulf of Mexico to the bend at Horn Island Pass.
  - Increase the depth of the upper Pascagoula Channel including the Pascagoula River portion to 42 feet from the split with the Bayou Casotte Navigation Channel to a point 1 mile south of the railroad bridge in the Pascagoula River.
  - Increase the depth of the impoundment basin in Horn Island Pass to 56 feet.

- Place dredged material in the littoral disposal area/open water disposal site 10 south of Horn Island and in the Pascagoula Offshore ODMDS.

#### Maintenance Dredging Work

- Perform maintenance dredging of the entire Federal Pascagoula Harbor Navigation Project.
- Place dredged material using ODMDS, upland sites (such as Triple Barrel), and open water disposal sites on the west side of the Pascagoula Harbor Navigation Channel.
- Include the beneficial use of dredged material site at Singing River Island.

#### Dredged Material Placement

##### *Littoral Zone Disposal*

Littoral zone disposal entails placement of material in shallow nearshore waters (-14 to -22 mean lower low water [MLLW]) along the coast or near barrier islands. Materials would be placed in those areas to supplement the littoral drift system. Littoral zone disposal in the area southeast of Horn Island is a preferred location of placement for sandy sediment removed in the vicinity of Horn Island impoundment basin. Suitable material removed from within the Bar Channel segment would be placed within the existing littoral zone disposal area.

##### *Open-Water Disposal*

Seven existing open-water disposal sites are located near and to the west of the Pascagoula Harbor Navigation Channel. These seven areas would be used for maintenance dredging material. Disposal at those sites is restricted to depths below -4 ft MLLW. When practical and feasible, thin-layer disposal would be used in disposal sites 5, 6, 7, 8, and 9. Use of the open-water disposal sites located in the State of Mississippi's territorial waters requires compliance with the state's ambient water quality criteria. A dredged material management plan establishes the monitoring requirements that are used before and after the disposal of dredged material.

##### *Existing ODMDS Disposal*

The Pascagoula ODMDS encompasses an area of approximately 18.5 square nautical miles and is bound by Horn Island to the north, the Pascagoula Harbor Navigation Channel to the east, the navigation safety fairway to the south, and a north-south line running through Dog Keys Pass to the west. The Pascagoula ODMDS ranges from depths of about 38 feet in the northern section to over 52 feet in the southern section. Disposal at the ODMDS is restricted to depths below -20 ft MLLW.

The Pascagoula ODMDS was intended to be used for maintenance and new work materials from the Pascagoula Harbor Navigation Channel, maintenance material from the channels and turning basin associated with Naval Station Pascagoula, and by private entities, such as the Jackson County Port Authority, Northrop Grumman Ship Systems Ingalls Operations, and the Chevron Refinery. This site would be used as a disposal site for a portion of the new work material and future maintenance material.

### *Singing River Island*

Singing River Island is a man-made island originally created from deposition of dredged material. The Proposed Action includes beneficial use placement of maintenance dredged material at the Singing River Island site. A containment dike would be constructed with geotubes around the fill area for protection against erosion by waves and currents. Land created using these materials would be used for wetland creation. The USACE is including beneficial use of dredged material at Singing River Island as part of its long-term Pascagoula Harbor maintenance program. Over a 20 to 30-year time period, this 425-acre site is expected to accommodate approximately 8,768,000 CY of dredged material. Details regarding the placement of material, monitoring, and managing of the site are provided in the Pascagoula Harbor DMMP.

### *Triple Barrel*

Triple Barrel upland disposal site is located north of Singing River Island on the west bank of the Pascagoula River just south of the L&N Railroad. The site encompasses about 92 acres and accommodates placement of dredged material from the mouth of Pascagoula River Harbor northward to the railroad bridge. Details regarding the placement of material and management of the site are provided in the Pascagoula Harbor DMMP. The Triple Barrel upland disposal site is intended for the placement of maintenance dredged material.

### **No-Action Alternative**

Under the No-Action Alternative, the USACE would continue to maintain the existing navigation channel with the present dimensions, which include:

- A Bar Channel segment that is 44 feet deep and 450 feet wide
- An upper Pascagoula Channel segment that is 38 feet deep and 350 feet wide
- A Horn Island impoundment basin that is 44 feet deep located west of Petit Bois Island

In addition, the No-Action Alternative would include maintenance dredging of the entire Federal Pascagoula Harbor Navigation Project.

This alternative was not selected because it does not meet the purpose and intent of the legislative language contained in Public Laws 99-662 and 109-148.

### **Selection of the Proposed Action**

USACE determined that the proposed action best satisfies the purpose and need for the project. As provided in the Channel Widening PIR, the widening of the bar channel is the only portion of the proposed action new dredging work to be constructed under the PIR. The benefits anticipated from implementation of this alternative would include long-term improvements to commercial vessel traffic, navigation safety, and socioeconomic conditions in the Pascagoula region. In addition, nearshore fish habitats would benefit from renourishment and protection from erosion by the placement of suitable dredged material in the littoral zone.

The proposed action would cause short-term minor impacts to benthic invertebrates, fish communities, mollusks, crustaceans, and essential fish and shellfish habitats at the dredged and disposal sites. Existing sediments at disposal sites would also incur short-term minor

impacts prior to added sediments mixing and reworking. There would be potential for minor short-term noise-related impacts to roosting birds on the western edge of Petit Bois and Disposal Area 10 Island. Temporary negligible impacts would occur from disruption to marine mammal communities, marine and coastal birds, protected species, commercial and recreational fishing, and recreation during dredging activities. Impacts to water quality were evaluated based on the 404(b)(1) guidelines and were determined to be temporary and minor in the immediate vicinity of the dredge and disposal operations. Negligible amounts of air pollutants would be generated during the operation of dredging vessels. Permanent changes would occur to bathymetry as a result of channel widening.

No adverse impacts would be expected to occur to plankton, hard bottom habitats, submerged aquatic vegetation, geology, meteorology, physical oceanography, marine sanctuaries, cultural resources, minority populations, low-income populations, children, utilities, or public safety.

Long term cumulative beneficial impacts to the Pascagoula region would occur from enhancement of shipping operations to Pascagoula Harbor. The Port of Pascagoula is the largest port in Mississippi and is centrally located on the Gulf of Mexico. Pascagoula is heavily dependent on the maritime industry and is also the home of Mississippi's largest employer, Northrop Grumman (shipbuilder), which locally employs 10,176 people. Typical export cargo ranges from forest/paper products to frozen foods to machinery and vehicles. The Port of Pascagoula experienced a 2004 trade value of \$4,624,000, including \$764,000 in total exports and \$3,878,000 in total imports. It is expected that the volume of shipping will increase and transit time for larger vessels will decrease following expansion of the navigation channel.

### **Consideration of Public and Agency Comments**

Throughout the development of the SEIS, the USACE considered public and agency comments and incorporated information received into the SEIS as appropriate. The USACE considered public comments provided during a February, 2007 scoping meeting, a May, 2007 public workshop, an August, 2007 public hearing, and comments submitted during the formal public comment periods. Summaries, transcripts, presentation and scoping meeting posters, and the Draft and Final SEIS documents were posted on the Pascagoula Harbor Navigation Channel SEIS web site (<http://www.usacepascagoulaeis.net/>). The Draft and Final SEIS documents were also available at local libraries and from the USACE upon request. Meetings to present information on the Proposed Action were held with Federal, State, and local agencies, environmental groups, and interested individuals as part of the National Environmental Policy Act (NEPA) process.

The USACE circulated the Draft SEIS in June 2007 for public review and comment. Comments were received from elected officials, Federal and State agencies and citizens. The USACE considered all comments received and responded to comments by modifying the proposed action, changing the text of the document, or explaining why changes in the documentation were not needed. Letters and responses to comments are in Appendix A of the SEIS. All of the comments received were carefully considered during the development of the SEIS. Specific comments were received from the Department of the Interior, U.S. Environmental Protection Agency (EPA), the Gulf of Mexico Fisheries Management

Council, the National Marine Fisheries Service, U.S. Fish and Wildlife Service (USFWS), and the Mississippi Department of Marine Resources. As a result of these comments, the possible presence of submerged aquatic vegetation at one disposal location was clarified and surveys were performed to ensure no impacts would occur from disposal of dredged material. Additional information was also added to discussions of essential fish habitat and potential impacts to the benthic community.

The Final SEIS was initially provided to the South Atlantic Division office for filing on 9 September 2009. The USACE circulated the SEIS in July and August 2010 for public review and comment. EPA published the Notice of Availability of the Final SEIS in the Federal Register on July 23, 2010 (75 FR 43160-02). Specific comments were received from the Mississippi Department of Wildlife, Fisheries and Parks (MDWFP), EPA, National Park Service (NPS) and the USFWS. As a result of these comments, the following clarifications are noted for the proposed action:

- 1). In response to MDWFP's comment on invasive species, it is expressly noted that the proposed action will be conducted in accordance with the U.S. Army Corps of Engineers Invasive Species Policy dated June 2, 2009.
- 2). EPA had additional comments related to the oil spill and cumulative impacts. The impacts of the Deepwater Horizon oil spill on coastal Mississippi are uncertain at this time. This spill could potentially adversely impact USACE water resources projects and studies within the Mississippi coastal area. Potential impacts could include factors such as changes to existing or baseline conditions, as well as changes to future-without and future with-project conditions. The USACE will continue to monitor and closely coordinate with other Federal and State resource agencies and local sponsors in determining how to best address any potential problems associated with the oil spill that may adversely impact USACE water resources development projects/studies. This could include revisions to proposed actions, as well as, the generation of supplemental environmental analysis and documentation for specific projects/studies as warranted by changing conditions. According to the 2007 Memorandum of Understanding between the USACE, South Atlantic Division and EPA, Region 4, the USACE would consult with EPA, in addition to the State of Mississippi, prior to the disposal of dredged material from areas potentially impacted by the spill. The USACE conducted additional sediment testing in November and December 2010 in accordance with the *Approach for Evaluating Sediment for Proposed Ocean and Near Coastal Placement: Determining Oil Contamination from Deepwater Horizon Spill*. Results of data to date indicated no oil impact; this data was shared with EPA.

Regarding cumulative effects, since the completion of the SEIS, oil spill recovery and the cleanup and rebuilding following the landfall of Hurricane Katrina in August 2005 represent ongoing, large-scale activities in the Gulf. Oil spill recovery impacts are discussed above. The majority of the Katrina recovery work will continue to occur onshore, where there would be little potential for interaction with the proposed action, except for socioeconomic resources. Construction to authorized dimensions and operation and maintenance of the Federal navigation channel would facilitate commercial shipping in Mississippi and Alabama, which would in turn promote economic recovery in the region. In addition, the Mississippi Coastal Improvements Project (MsCIP) has resulted in the preparation of a SEIS to restore the barrier islands off the Mississippi coast. Additional environmental restoration,

such as emergent tidal marsh, wet pine savannah, and beach/dune habitats, would occur along the Mississippi coast. No significant adverse direct cumulative impacts are expected as a result of interactions with these large-scale activities. EPA expressed concerns that comments in the Draft SEIS on cumulative impacts had not been adequately addressed in the SEIS and additional information was requested. The following summarizes each concern and the response:

- a. Existing federal and state permitted facilities in the project area and any reasonable foreseeable cumulative impacts associated with the project and those permitted facilities.

Details on the permitted facilities can be found in Section 4.5.6 of the SEIS. Pascagoula Harbor consists of two highly industrialized navigation channels, Pascagoula and Bayou Casotte. In addition to these identified permitted sites (Section 4.5.6), future federal and state permitted facilities are likely but unknown at this time due to the dynamic commercial nature in the project vicinity. No water quality concerns were raised by Mississippi Department of Environmental Quality, Office of Pollution Control, the agency issuing Water Quality Certification pursuant to Section 401 of the Federal Water Pollution Control Act (33 U.S.C. 1251, 1341). In addition, USACE, Mobile District conducted analysis on the physical, biological and chemical parameters of the dredged material (new work and O&M), elutriates, and modified elutriates. All of this scientific data was utilized in the Section 103 Evaluation, which was provided to EPA for its concurrence under the Marine, Protection, Research and Sanctuaries Act. EPA has provided its Section 103 concurrence. As such, the USACE addressed EPA's concerns by discussions between the agencies and clarifying responses in this document. The project will not contribute significantly to cumulative impacts on water quality.

- b. Any future State plans for construction of additional fish havens or artificial reefs in the area.

The Corps has contacted the State of Mississippi. Currently, future plans do not include the addition of new havens or artificial reefs in the area (see page 4 of Comments and Responses matrix, Appendix A).

- c. Proposed harbor expansions and ocean disposal sites in the vicinity of the proposed project.

Construction is ongoing to widen the Gulfport Harbor Federal Navigation Channel, within the Mississippi Sound to its authorized dimensions. This project utilizes beneficial use sites for new work material at Chandeleur Islands and the littoral site. The USACE and EPA are designating a new Gulfport ODMDS for additional dredged material capacity. The Mississippi State Port Authority submitted a regulatory application for the expansion of the harbor, channel and onshore improvements, and is preparing an EIS. These projects will likely be separated in time and/or distance from the Pascagoula navigation project. While an increase in shipping volume is anticipated, the widening project should also decrease transit time for larger vessels, and the overall cumulative impacts are not expected to be significant.

- 3). In response to the NPS's comment, dredged material from maintenance dredging operations that would be used for littoral placement will contain a sand fraction of 70 to 90%.
- 4). As a response to the NPS's recommendations, when possible, seasonal timing of dredging activities in the vicinity of barrier islands will be implemented to limit potential impacts to threatened and endangered species. USACE will attempt to conduct dredging activities in those areas between the months of November and February. In addition, USACE will abide by the conditions of the most recent Regional Biological Opinion for the Gulf of Mexico during dredging and placement operations.
- 5). In response to the NPS's recommendation, the proposed action would deepen, but not alter the alignment or location, including the width, of the Horn Island Pass impoundment basin (however, as previously noted, the Horn Island deepening is not a part of the Channel Widening PIR).
- 6). In response to general NPS's comments and specific recommendations, the USACE has a separate program – the Mississippi Coastal Improvement Program – which includes a goal of maintaining suitable island sediments in the natural transport system. Littoral zone placement sites are being identified east of each barrier island, such as Petit Bois, to promote sustainability. As projects are identified under this program, they will be reviewed and implemented to help restore and protect the barrier island system.
- 7) In response to the USFWS' comments and recommendations, the USACE intends to follow the conservations recommendations consistent with the federal standard and the Gulf Regional Biological Opinion, and (as noted above) coordinated with the NPS regarding barrier island impacts.

### **Monitoring**

Monitoring throughout the dredging and disposal activities will be implemented to protect natural resources and water quality in adherence with all environmental laws and regulations. Monitoring activities include implementation of the requirements of the Regional Biological Opinion for the Gulf of Mexico from NOAA for the protection of sea turtles and Gulf sturgeon, and use of special operating conditions if manatees are observed near the dredge or disposal vessels.

All requirements and conditions of the Mississippi Department of Environmental Quality's Section 401 water quality certification for the project will be followed to protect water quality at the dredge and disposal sites.

### **Statement of Decision**

In summary, I find the proposed action, as described in the Pascagoula Harbor Navigation Channel SEIS, is consistent with all applicable statutory and regulatory requirements, provides for the Congressionally authorized width and depth of the navigation channel and future maintenance, is technically justified, improves economic efficiency, and includes practicable means to avoid or minimize environmental impacts. After careful consideration of these factors and public and agency comments, I have determined that the proposed channel improvements to Pascagoula Harbor, as described in the SEIS, are in the public



interest, and that the widening of the Bar Channel should proceed under the Channel Widening PIR. This ROD completes the NEPA process.

Issued in Atlanta, Georgia on August 19<sup>th</sup>, 2011

A handwritten signature in black ink, appearing to read "Todd T. Semonite", is written over a horizontal line. To the right of the signature, the letters "MB" are handwritten.

Todd T. Semonite  
Major General, US Army  
Division Commander  
South Atlantic Division